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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---------------------------------------------------------|-------------|------------------------|---------------------|------------------|
| 09/843,069 | 04/26/2001 | Rodney Carlton Burnett | AUS920010161 | 8483 |
| 7590 | 10/18/2005 | | EXAMINER | |
| Darcell Walker 8107 Carvel Lane Houston, TX 77036 | | | DERWICH, KRISTIN M | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2132 | |

DATE MAILED: 10/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 09/843,069 | BURNETT ET AL. | |
| | Examiner | Art Unit | |
| | Kristin Derwich | 2132 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 July 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) 22-28 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

PD

DETAILED ACTION

Response to Amendment

1. This action is in response to amendments received July 27, 2005.

Response to Arguments

2. Applicant's arguments filed July 27, 2005 have been fully considered but they are not persuasive. With regard to Applicant's argument that Kenton does not mention the generating of a list of special device files Examiner respectfully disagrees. The keys file of Kenton acts as the list of special device files because it contains a series of driver license keys representing the class of peripheral devices that includes the peripheral device in question (3:42-54). The series of driver license keys function as special device files because they are files that represent a given peripheral device.

Claim Rejections - 35 USC § 102

3. Claim 1 rejected under 35 U.S.C. 102(b) as being anticipated by Kenton et al. (Kenton), U.S Patent No. 5,479,612.

As per claim 1, Kenton discloses a method for controlling access to a computer system device comprising steps of:

retrieving the file attributes for the device file used in the system device access attempt (column 3, lines 63-65; column 4, lines 16-24, column 4, lines 41-44);

Kenton demonstrates retrieving file attributes for the device files by obtaining identification information about the device file. In addition, because it has been

Art Unit: 2132

established that the identification information is being obtained from the device file being used in the system device access attempt, it has also been established that the resource making the access attempt is a device file thus encompassing the second element of this claim.

determining whether the resource that is making the access attempt is a special device file (column 3, lines 63-65; column 4, lines 16-24, column 4, lines 41-44);

As established above, the resource making the access attempt must be a special device file since the claim states that the file attributes will only be retrieved for a device file used on the system device access attempt.

Kenton demonstrates the functionality of a special device file, through a device driver. Device drivers, "act as the portal to the device and its underlying functionality (Background of Invention, paragraph 1, lines 17-18)." Thus, a device driver is a special device file and will be referred to as such for the remainder of this office action.

searching a mapping database for device files that represent the system device that is the object of the access attempt and generating a device file entry list of all protected device files that represent said system device (column 4, lines 29-33; column 5, 18-22);

Kenton exhibits the functionality of a "mapping database" through the use of device identification information as the look up data to be compared to a list of devices supported by the operating system. The identification information is mapped to the device it represents.

Kenton demonstrates the functionality of “protected device files” through the use of device files needing license keys in order to be accessed. Since access is denied if these licenses are not present, this protects the devices from being accessed by the user and are considered protected device files.

generating an authorization decision for the access attempt to the system device based on the security policy that governs each device file in the device file entry list (column 5, lines 36-47).

Unless applicant defines a more specific security policy, the one demonstrated by Kenton, based on the presence of driver licenses, qualifies as a security policy that generates an authorization decision for an access attempt.

As per claim 2, the rejection of claim 1 is incorporated, and further Kenton discloses before said searching step the step of terminating said access control method when the accessing resource is not a special device file (column 4, lines 34-40).

As previously stated in claim 1, the resource must be a device file making the access attempt to have the file attributes retrieved from it, thus, if it were not a device file the file attributes would not have been retrieved and the identification information needed in order to proceed to the next step of the access control method would not have been obtained. As a result the method would be terminated.

As per claim 3, the rejection of claim 1 is incorporated, and further Kenton discloses after said searching step the step of terminating said access control method when said searching step did not find any database entries that had device

Art Unit: 2132

specifications that match the device specifications of the device file making the access attempt (column 4, lines 30-40).

Kenton's identification information embodies the functionality of applicant's device specification.

As per claim 4, the rejection of claim 1 is incorporated, and further Kenton disclose said searching step comprising the steps of:

retrieving an entry from the mapping database (column 4, lines 29-34);

comparing the device specification of the device file making the access attempt to the device specification of the database entry (column 4, lines 29-34); and

comparing the file name of the device file making the access attempt to the protected object name of the database entry (column 4, lines 29-34).

Kenton demonstrates the functionality of retrieving an entry from the list, i.e. mapping database, by virtue of the comparison step. In order to find and compare the correct peripheral device in the list, an entry in the list has already been retrieved in order to make the comparison since the entire list cannot be compared at the same time. Kenton shows the comparison of the immediate entry against each entry in the list. Each entry contains the device identification information and the device the identification information represents, thereby showing how this step compares both the specification of the device file and the object name.

As per claim 5, the rejection of claim 4 is incorporated, and Kenton discloses a method further comprising after said file name comparison step the steps of:

generating a device file entry list containing the database entry with the same file

Art Unit: 2132

specification and file name as the device file making the access attempt (column 5, lines 27-28);

Kenton demonstrates the functionality of generating a device file entry list by writing to a log file.

terminating said searching step (column 5, lines 46-47).

As per claim 6, the rejection of claim 4 is incorporated, and Kenton discloses a method further comprising after said file name comparison step the steps of placing in a file entry list, a mapping database entry having the same file specification as, but different file name from the device file making the access attempt (column 5, lines 36-40).

Kenton shows the functionality of the list the applicant mentions through a list of devices which all share similar attributes and are grouped together but lack a driver license which is another way in which the peripheral devices are identified and access is controlled, i.e. the device file name.

As per claim 7, the rejection of claim 6 is incorporated, and further Kenton discloses a method comprising the steps of:

determining whether there are more entries in the database (column 4, lines 33-36);

retrieving the next mapping database entry for comparison with said device file making the access attempt, when more entries are found in the mapping database (column 4, lines 33-36); and

returning to said device file comparison step (column 4, lines 33-36).

Art Unit: 2132

In order to be assured that the a peripheral device is not included in the list, the search must include looping through the entire list entry by entry until no more entries remain.

As per claim 8, the rejection of claim 2 is incorporated, and further Kenton discloses a method wherein said authorization decision step comprises the steps of:

retrieving the current entry in the device file entry list (column 5, lines 18-22);

In order to do the search, an fentry would have to be retrieved in order to proceed to the access decision step.

calling the access decision component to obtain an access decision for the access attempt to the system device based on the security policy that governs the current entry in the device file entry list (figure 2, item 216);

determining whether decision component granted access (column 5, lines 46-47);

The purpose of the access decision component is to decide whether or not to grant the resource access to the device, therefore this step is redundant since it is already incorporated into the access decision component.

determining whether more entries are in this file entry list, if decision component granted access (column 5, lines 36-46); and

updating current entry in said device file entry list and returning to said current entry retrieving step (column 5, lines 36-46).

Kenton exhibits the functionality of looping from the step of retrieving the next entry in the file entry list and determining if there are more entries by having to add all of

Art Unit: 2132

the values in the quantity fields for every valid installed key. In order to exhaust every valid installed key in the list, this step would have to loop through the entire list to add up each value, therefore, it would have to determine whether there are more entries and then return to the retrieval step if there were remaining items in the list.

As per claim 9, the rejection of claim 8 is incorporated, and further Kenton discloses comprising after said decision determination step the step of denying the access attempt to the system device if the decision component of a device file entry denies access (item 216, figure 2, follow the "optional no" path).

As per claim 10, the rejection of claim 8 is incorporated, and further Kenton discloses a method comprising the step of allowing the access attempt to the system device if no more entries are in the file entry list (step 216, figure 2).

As previously stated, step 216 exhausts the entire list of valid installed keys in order to find the sum of all entries. Once the sum is computed, there are no more entries in the list and regardless of the decision, both paths lead to the use of the device.

As per claim 11, Kenton discloses a method for controlling access to a computing system device being accessed through a device file, said access control being through an externally stored resource and comprising the steps of:

monitoring the computing system for activities related to creating and accessing special device files that represent system devices (column 3, lines 25-30);

Art Unit: 2132

Since device drivers are the communication line between the peripheral devices themselves and the operating system, the device drivers themselves monitor when an access attempt is being made.

restricting the creation of special device files based on rules defined in the externally stored resource (column 4, lines 64-67); and

restricting special device file accesses based on rules defined in the externally stored resource (column 5, lines 5-8).

The special device file access is restricted based on the rules associated with the driver license.

As per claims 12-19, this is a product version of the claimed method discussed above in claims 1-11 wherein all claimed limitations have also been addressed and/or cited as set forth above.

As per claim 20, Kenton discloses a computer connectable to a distributed computing system, which includes special device files containing information, related to corresponding system devices comprising:

a processor (column 3, line 5; item 112, figure 1);

a native operating system (column 3, lines 21-22; item 106, figure 1);

application programs (column 3, lines 57-59);

an externally stored authorization program overlaying said native operating system and augmenting the standard security controls of said native operating system (column 4, lines 41-44);

a mapping database within said external authorization program containing a

Art Unit: 2132

system device to a protected object name entries for each protected file system object (column 4, lines 29-33);

and

a decision component within said authorization program for controlling access to special device files representing system devices (column 5, lines 15-22; column 6, lines 52-53).

As per claim 21, the rejection of claim 20 is incorporated, and Kenton discloses a computer comprising an authorization program for restricting the creation of special device files representing protected system devices (column 4, lines 64-67).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Art Unit: 2132

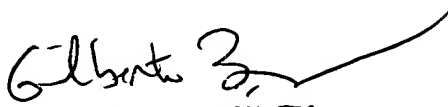
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kristin Derwich whose telephone number is 571-272-7958. The examiner can normally be reached on Monday - Friday, 8:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kristin Derwich
Examiner
Art Unit 2132

KMD
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